Liliya A. Yatsunyk
James H. Hammons Chair in Chemistry
Department of Chemistry and Biochemistry
http://www.swarthmore.edu/academics/liliya-yatsunyk.xml
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Education

1999-2003 Ph.D., Chemistry, University of Arizona, Tucson
1992-1997 Honors Diploma, Chemistry, Chernivtsi State University, Ukraine
1992-1998 Specialist degree, Ecology and Protection of Environment, Chernivtsi State University, Ukraine

Professional Experience

2024-present James H. Hammons Chair in Chemistry

2023-2024 Chair, Department of Chemistry and Biochemistry

2020-present Professor, Department of Chemistry and Biochemistry, Swarthmore College, Swarthmore, PA

2019-2021 Chair, Department of Chemistry and Biochemistry

2018-2019 Visiting scientist at the Slovenian NMR Center in the research group of Prof. Janez Pavec and at the the European Institute of Chemistry and Biology, research group of Prof. Valerie Gabelica, Bordeaux, France. Supported by NIH grant.

2013-present Associate Professor, Department of Chemistry and Biochemistry, Swarthmore College, Swarthmore, PA

2014-2015 Visiting scientist at the European Institute of Chemistry and Biology, research group of Jean-Louis Mergny, Bordeaux, France. Supported by *Initiative d'Excellence de l'université de Bordeaux* (IdEx Bordeaux) and *Professeur Invité.*

2010-2011 Visiting scientist at the European Institute of Chemistry and Biology, research group of Jean-Louis Mergny, Bordeaux, France

2007-2013 Assistant Professor, Department of Chemistry and Biochemistry, Swarthmore College, Swarthmore, PA

2003-2007 Postdoctoral Fellow, Departments of Biochemistry, Molecular Biology, and Cell Biology and of Chemistry, Northwestern University, Evanston, IL
Research Director: Prof. Amy C. Rosenzweig
Research topics: Biochemical and biophysical studies of N-terminus of the Wilson Disease protein and its chaperone; Crystallographic and biochemical studies of periplasmic zinc binding protein, ZnuA; Crystallographic studies of ZnD-dme substituted myoglobin

1999-2003 Graduate Research Assistant, Chemistry Department, University of Arizona, Tucson, AZ
Research Director: Prof. F. Ann Walker
Dissertation Title: Synthesis, Structure, and Magnetic Spectroscopies (NMR, EPR and Mössbauer) of Non-Planar Hemes as Models of the Cytochrome *b* Heme Centers

2000-2002 Research Assistant, NMR Facility, Chemistry Department, University of Arizona
Maintenance of five Bruker and Varian NMR spectrometers (200-600 MHz); UNIX administration; user training and support

1996-1999 Undergraduate Research Assistant, Chemistry Department, Chernivtsi State University, Ukraine.
Research Director: Prof. Oleg E. Panchuk
Thesis Title: Group IV dopant effect in CdTe semiconductors

Professional Affiliations and Activities

- Reviewer of the Biochemistry programs at Occidental College, LA; Bucknell University, PA.
- Member of American Chemical Society, Sigma Xi, Society of Porphyrins and Phthalocyanines (spp02175), and Society of Biological Inorganic Chemistry
- Frequent reviewer for more than 25 scientific journals, e.g. Nucleic Acids Research, Biochimie, Biochemistry, Chemical Communications, Journal of the American Chemical Society, Journal of Physical Chemistry, Inorganic Chemistry, PlosOne, Scientific Reports, etc
- Reviewer of grant proposals for the following programs:
    - NIH panel (2021, 2023)
    - ad hoc reviewer for NIH Biological Chemistry and Macromolecular Biophysics Integrated Review Group Macromolecular Structure and Function B Study Section (MSFB: October 2020; October 2021);
    - NSF Virtual Nucleic Acids Panel (Spring 2021);
    - NSF-CLP (March 2018)
    - NSF MRI panel (2011, 2016, 2018, ad hoc for one proposal May 2023);
    - ACS Petroleum Research Fund;
    - Research Corporation;

- internal reviews for NIST

- Presented workshop for "Expanding your Horizons" and "Catalyst" programs at Swarthmore College designed to encourage middle school girls to consider careers in the sciences. (March 2010, March 2012)

Swarthmore College Service

- Department head (2019-2021; 2023-2024)
- Member, Middle States Working Group: Support of the Student Experiences, Swarthmore College, 2017-2018
- Sigma Xi president 2017-2018
- Faculty Athletic Representative (FAR) 2015-2017
- Athletic Advisor to the Volleyball team 2008-present
- Research Ethics/IRB Committee 2011-2014
- Ad Hoc Committee on Foreign Language Acquisition 2012-2014
- Committee on Fellowships and Prizes 2008-2010

Teaching Experience prior to Swarthmore

2006, 2005 Lecturer, Biological Science 110-2, Summer School, Northwestern University

2005 Spring Lab lecturer and coordinator, General Chemistry Laboratory course, School of Continuing Studies, Northwestern University

2003 Spring Teaching Assistant, Structural Chemistry (single crystal and powder X-ray diffraction), Chemistry Department, University of Arizona

2000-2002 Teaching Assistant, Practical NMR spectroscopy Lecture/Lab, Chemistry Department, University of Arizona; Led workshops in NMR spectroscopy for the NMR Facility, University of Arizona

1999-2000 Teaching Assistant, Organic Chemistry I and II, Chemistry Department, University of Arizona

1998-1999 Teaching Assistant, Inorganic Chemistry, Chemistry Department, Chernivtsi State University

1996-1999 Chemistry High school teacher, Korovia High School, Korovia, Chernivtsi region, Ukraine

Research Students Supervised at Swarthmore (*students who started working in the lab during or right after their freshman year; **bolded** – students who completed theses)

Student name	**Career Path**
1. Erin Coyle `28*	Current Swarthmore undergraduate
2. Jennifer Zhao `28*	Current Swarthmore undergraduate
3. Katleo Pule `27	Current Swarthmore undergraduate
4. Emily Sun `27	Current Swarthmore undergraduate
5. Andrew Hendrickson `27*	Current Swarthmore undergraduate
6. Mina Oishi-Patel `26	Current Swarthmore undergraduate
7. Jon Suh `26	Current Swarthmore undergraduate
8. Hannah Swale `26	Current Swarthmore undergraduate
9. Joseph Eyiolowope `26	Current Swarthmore undergraduate
10. Eric Xing `26*	Current Swarthmore undergraduate
11. Abdullah Ali `25	Research Assistant, University of Pennsylvania
12. Gwendolyn Lam `24	NIH postback, Research Scientist I, Rapafusyn Pharmaceuticals
13. Harrison Kim `24	Research Assistant at the Memorial Sloan Kettering Cancer Center
14. Erin Chen`23*	Engineering Physicist I at the Fermi National Accelerator Laboratory
15. Paul Seth `23	Research Assistant, University of Washington Fred Hutch Cancer Center in the laboratory of Cyrus Ghajar
16. Tamanaa Atrafi `23	Medical student at Sidney Kimmel Medical College at Thomas Jefferson College
17. David (Ming) Ye `23	PhD program, MIT Biology, started 2022
18. Zahara Martinez `23	Graduated 2023
19. Sara Yun `23	Associate Scientist, Estée Lauder Companies,
20. Kevin Li `22	PhD program, MIT Biology, started 2021
21. Charlotte Pohl `22	PhD program in Bioscience, University of Utah. Former research Assistant at the Memorial Sloan Kettering Cancer Center
22. Elizabeth Gallagher `23	Senior Research Assistant, Dean's Special Projects at Brown University School of Public Health
23. Joanne Miao`22*	Medical Assistant Student
24. Dana Beseiso`21	PhD program, University of Michigan
25. Hyun Kyung Lee `21*	PhD Molecular Biology and Biochemistry at Yale. Previously, postbac at NIH, Frederic
26. Ariana Yett `21*	Food and Beverage Analyst at Chipotle (2021-current)
27. Jack Rubien `20	PhD program, MIT, (2021-current). Research assistant, Jim Shorter's lab, University of Pennsylvania (2020-22)
28. Yanti Manurung `20	Graduate School, Northwestern. Research assistant, Awatramani's lab at Northwestern University
29. Linda (Yingqi) Lin `20*	MDPhD program at Yale. Former research assistant, Daniel Bauer's lab at Boston Children's Hospital
30. Allan Gao `19	MD program, University of Minnesota (2021-2025) Research assistant, Jim Shorter's lab, University of

	Pennsylvania
31. Letitia (Ying) Ho `19	Research Assistant, Daniel Bauer, Boston Children's Hospital.
32. Deondre Jordan `19*	Data Analyst at the American Association for Cancer Research (2022-2023) Middle school science teacher 21/22 academic year Research Assistant, Jay Schneekloth lab, NIH 2019-21
33. Sayed Malawi `18	Data Scientist at Consumer Edge Insight
34. Amber Sheth `18	MD program, University of Wisconsin-Madison School of Medicine and Public Health
35. Barrett Powel `18	PhD program, MIT (2018-current)
36. Alice Liu `18	MD program, University of Michigan (2020-present) Public health research at Johns Hopkins Wilmer Eye Institute in the lab of Dr. Megan Collins
37. Irene Xiang `18	Investment Banking Analyst at Keefe, Bruyette & Woods bank
38. Delfin G. Buyco `17	PhD program, Northwestern (Interdisciplinary Biological Sciences program 2021-current) Research Assistant, University of Pennsylvania
39. Joo Hyun Lee `17	Dentistry program, NYU (2018-current); (Past) Research Assistant at UCSF School of Dentistry
40. Jessica Chen `17*	Dentistry program at Pennsylvania Dental Medicine (2018-current); (Past) Research Specialist in Prof. Maday lab in Perelman school of medicine, University of Pennsylvania
41. Kara Bledsoe `16	Masters in Library and Information Science with a special certificate in digital archives at the Pratt Institute, New York
42. Mary Kuchenbrod `16	Consultant at Arcadia Healthcare Solutions with plans to pursue MBA
43. Thomas L. Ruan `16	PhD program Physiology, Biophysics and Systems Biology (PBSB) program at Weill Cornell (start Fall 2019). (past): Technician in the laboratory of R. Sampogna at Columbia University Department of Medicine, Nephrology
44. Joshua Turek-Herman `16*	PhD program, Princeton University; (past) Postbac Cancer Research Training Award at the NCI-Frederick in Dr. Mikhail Kashlev's lab
45. Katherine Bredder `15	At Morningstar – an index fund ratings company in Chicago; tech development program
46. Cole Harbeck `15*	Works for software company, Metarhythm
47. Supriya Davis `15	MD program, Duke University; Fulbright scholarship 2015-16, New Delhi, India
48. Navin C. Sabharwal `14	MD program, Cleveland Clinic Lerner College of Medicine
49. Michelle N. Ferreira `14	MD program, Yale School of Medicine (ASC-SURF); Residency – Duke University; Oncology fellowship – Hopkins
50. Steven Barrett `13*	PhD program, Stanford University, Biochemistry (NSF Graduate Fellowship)
51. Vienna Tran `13	MD program, University of Rochester

52. Karan Ahluwalia `13	MD program, UNC Chapel Hill
53. Rowen Jin `12	MD program, UCSF
54. Jack Nicoludis `12*	PhD program, Harvard University, Chemistry and Chemical Biology (Goldwater scholarship, NSF and NDSE Graduate Fellowships); completed
55. Erica Evans `11	Science of Nursing program, Salisbury University
56. Amlan Bhattacharjee `11*	MD program, SUNY Downstate Medical Center
57. David Kornfilt `09	PhD program, Chemistry, University of Illinois (ASC-SURF); currently, post doctoral fellow at Princeton in Prof. McMillin lab
58. Scott Taylor `09	Analyst at Amazon Fulfilment
59. David Marquardt `08	Analytical Developer at Biogen Idec

Swarthmore Courses Taught *(in parenthesis – number of students in the course)*

Semester	Assignment #1	Assignment #2	Assignment #3	Research students advised
Fall 2007	Chem 10H (20)			
Spring 2008	Chem 46 (7)	Chem 46L (8)		Chem 094 (2)
Fall 2008	Chem 10H (25)	Chem 10L (23)	Chem 10L (21)	Chem 180 (1) Chem 094 (1)
Spring 2009	Chem 46 (11)	Chem 46L (11)	Chem 38L (12)	Chem 180 (1)
Fall 2009	Chem 10H (34)	Chem 32L (9)	Chem 32L (10)	Chem 094(1)
Spring 2010	Chem 46 (10)	Chem 46L (10)		Chem 094 (2)
Fall 2010 Spring 2011	On sabbatical			Chem 094 (1)
Fall 2011	Chem 10H (17)	Chem 10H FYS (8)	Chem 10L (14)	Chem 180(1)
Spring 2012	Chem 46 (10)	Chem 106 (6)	Chem 46L (4)	Chem 094 (3) Chem 180(1) Volunteer (1)
Fall 2012	Chem 10H (31)	Chem 10L (22)		Chem 094 (2) Chem 180 (2) Volunteer (1)
Spring 2013	Chem 46 (18)	Chem 46L (10)	Chem 46L (8)	Chem 094 (3) Chem 180 (2) Volunteer (1)
Fall 2013	Chem 10H (36)	Chem 106 (5)	Chem 10L (22)	Chem 180 (1) Chem 096 (1) Chem 094(2) Volunteer (1)
Spring 2014	Chem 56 (15)	Chem 57 (4)	Chem 57 (4)	Chem 180 (1) Chem 096 (1) Chem 094 (2)

				Volunteer (2)
Fall 2014 Spring 2015	On sabbatical			
Fall 2015	Chem 56 (15)	Chem 10L (22)	Chem 10L (22)	Chem 094 (1) Volunteer (1)
Spring 2016	Chem 57 (10)	Chem 57 (10)		Chem 094 (5) Volunteer (1)
Fall 2016	Chem 56 (20)	Chem 10L (14)	Chem 10L (20)	Chem 094 (5)
Spring 2017	Chem 57 (16)	Chem 57 (16)		Chem 094 (5) Volunteer (1)
Fall 2017	Chem 10H (20)	Chem 112 (7)		Chem 094 (2) Chem 180 (1) Volunteer (2)
Spring 2018	Chem 38L (10)	Chem 22L (10)	Chem 22L (14) Chem 93 (3)	Chem 094 (3) Chem 180 (1)
Fall 2018	On sabbatical			Chem 096 (1) Chem 094 (1) Volunteer (1)
Spring 2019	On sabbatical			Chem 096 (1) Chem 094 (1)
Fall 2019	Chem 56 (10)			Chem 180 (1) Volunteer (1)
Spring 2020	Chem 38L (12)	Chem 66 (10)	Chem 93 (1)	Chem 094 (3) Chem 180 (1)
Fall 2020	Chem 56 (9)	Chem 10 (18)		Chem 096 (1) Volunteer (3)
Spring 2021	Chem 66(5)	Chem 38L (11)		Chem 094 (3) Chem 180 (1)
Fall 2021	Chem 56 (7)			Chem 094 (4) Volunteer (2)
Spring 2022	Maternity leave			Chem 094 (4) Volunteer (1)
Fall 2022	Sabbatical leave			Chem 094 (2) Chem 096 (1) Chem 180 (1) Volunteer (1)
Spring 2022	Sabbatical leave			Chem 094 (5) Chem 096(1) Chem 180(1) Volunteer (1)
Fall 2023	Chem 56 (4)	Chair release		Chem 094 (2) Chem 096(1) Volunteer (2)
Spring 2024	Chem 112 (10)	Chem 65 (4)	Directed reading	Chem 094 (4)

			(4) Chair Release	Chem 096 (1) Volunteer (2)
Fall 2024	Chem 56 (11)	Chem 32L (12)	Chem 199 (4)	Volunteer (7)
Spring 2025	Chem 65 (5)	Chem 38L (11)	Chem 199 (4)	Chem 094 (4) Volunteer (4)

Course Titles:

Chemistry 10H:	Honors General Chemistry
Chemistry 10H FYS:	Honors General Chemistry First year seminar
Chemistry 10L:	General Chemistry, laboratory
Chemistry 22L:	Organic Chemistry I, laboratory
Chemistry 32L:	Organic Chemistry II, laboratory
Chemistry 38L:	Biochemistry, laboratory
Chemistry 046:	Inorganic Chemistry
Chemistry 46L:	Inorganic Chemistry, laboratory
Chemistry 056:	Inorganic Chemistry, same as Chemistry 046
Chemistry 057:	Advanced Integrated Experimental Chemistry (writing course)
Chemistry 066:	Advanced Experimental Chemistry: Inorganic
Chemistry 093:	Directed Reading
Chemistry 094:	Research project, typically 0.5 credit
Chemistry 096:	Research thesis, 1 credit
Chemistry 106:	Topics in Inorganic Chemistry: Bioinorganic chemistry
Chemistry 112:	Topics in Inorganic Chemistry: Supramolecular chemistry and DNA nanotechnology
Chemistry 180:	Honors research thesis, 1 credit
Chemistry 199:	Thesis writing workshop

External Grant Proposals and Awards

National Institute of Health (1R15CA253134)
Investigator: Liliya A. Yatsunyk
Period: 09/01/2020 – 09/01/2024 ($431,986; including no cost extension)
Deciphering the structure and dynamics of non-canonical DNA implicated in cancer

- The major goals of this proposal is to 1) To obtain X-ray structures of GQs and of GQ-ligand complexes; 2) To obtain X-ray structures of i-motif and i-motif-ligand complexes: 3) To elucidate the mechanisms of ligand-induced conformational changes in G-rich DNA

National Institute of Health (R01GM135443)
Investigator: Brett Kaufman; co-investigator Liliya A. Yatsunyk
Period: 9/01/2019– 8/31/2024 ($60,000)
Mitochondrial G-quadruplex structures in health and disease

- The goal is to determine the G-quadruplex forming potential of mitochonidria-derived DNA sequences (mtDNA). Another important goal is to characterize ligand binding properties (e.g. binding constants as well as ligand-induced stability) of the DNA sequences with the highest GQ-forming potential and selected small molecule ligands.

National Institute of Health (1R15CA208676-01A1)
Investigator: Liliya A. Yatsunyk
Period: 06/01/2017 – 06/01/2020 ($410,501)
Deciphering the structure and dynamics of quadruplex DNA and DNA-ligand complexes

- Our major goals are: 1) To obtain X-ray structures of G-quadruplexes (GQs) and of GQ-ligand complexes; 2) To elucidate the mechanisms of ligand-induced conformational changes in G-rich DNA; 3) To synthesize novel GQ ligands with improved binding affinity and selectivity and determine their in vivo effects.

Camille and Henry Dreyfus Teacher-Scholar Award
Investigator: Liliya A. Yatsunyk
Period: 09/01/2016- 08/31/2021 ($60,000)
Deciphering the structure and dynamics of quadruplex DNA and DNA-ligand complexes

- This proposal aims to develop new highly selective anti-cancer therapies. The research explores unusual DNA structures called quadruplexes that are involved in a significant number of cancer-related biological processes. Our work will yield comprehensive structural and mechanistic characterization of quadruplexes and their complexes with ligands.

Commonwealth of Pennsylvania, Department of Health CURE grant (S00000775_PA)
Investigator: Liliya A. Yatsunyk
Period: 01/01/2015-03/06/2017 ($11,956)
Understanding of interactions between porphyrin ligands and G-quadruplex DNA

- The project will contribute to our fundamental understanding of porphyrin interactions with GQ DNA, shed light on the origin of ligand selectivity for a specific DNA target, and provide guidance in preparation of GQ ligands with desired medicinal properties

Initiative d'Excellence de l'Université de Bordeaux (IdEx Bordeaux)
Investigator: Liliya A. Yatsunyk and Jean-Louis Mergny
Period: 2014-2015 academic year
Visiting professor Program

- The funds will pay three months' salary (March-May) during sabbatical visit to IECB, Bordeaux, France for research in Jean-Louis Mergny group.

Université de Bordeaux Professeur invité
Investigator: Liliya A. Yatsunyk and Jean-Louis Mergny
Period: summer/fall 2014
Visiting professor Program

- The funds will pay two months' salary (September/October) during sabbatical visit to IECB, Bordeaux, France for research in Jean-Louis Mergny group.

National Science Foundation MRI
Investigators: Robert S. Paley, Stephen T. Miller, Kathleen P. Howard, and Liliya A. Yatsunyk
Period: August 15, 2013 to July 31, 2016 ($269,990)
MRI: Acquisition of 400-MHz NMR Spectrometer

- The funds were be used for purchase of a new Avance III 400 MHz High Performance Digital NMR Spectrometer from Bruker Biospin Corporation to replace an aging and outdated 400 MHz spectrometer. The new instrument is housed in the Chemistry and Biochemistry Department at Swarthmore College.

Mellon Seed Grant
Investigators: Sharon Burgmayer, Liliya A. Yatsunyk, Robert Scarrow
Period: 2017-2019 ($6,000) and 2009-2012 ($5,300)
Support for T-BIC, a Scholarly Community of Tri-College Faculty and Students Investigating Bioinorganic Chemistry

- The funds are used to facilitate joint group meetings (4 per year) and fund outside speaker (1 per year). This setting brings together students and faculty engaged in the research in inorganic field from Swarthmore, Haverford, Bryn Mawr, and Ursinus and allows for fruitful idea exchange and result dissemination.

Camille and Henry Dreyfus Foundation Faculty Start-up Award
Investigator: Liliya A. Yatsunyk
Period: 2007- 2012 ($30,000)
Synthesis and Characterization of Novel Cationic Porphyrins: Applications to Cancer Treatment and Chirality Sensing.

- The goal of this project is to study the G-quadruplex DNA stabilization by interesting porphyrin ligands; to investigate the effect of a central metal substitution on porphyrin-DNA binding interactions; and to modify existing cationic porphyrins via lanthanide addition to improve and extend their chirality sensing of various biological substrates.

Research Corporation Cottrell College Science Award
Investigator: Liliya A. Yatsunyk
Period: 2009- 2010 ($41,380)
Synthesis and G-quadruplex DNA Binding of Novel β-substituted Cationic Porphyrins: Application to Cancer Treatment

- The goal of this project was to prepare β-substituted porphyrins and study the effect of β-substituents on porphyrin—G-quadruplex DNA binding modes, affinities and selectivities. As part of this project we synthesized beta-octaethyl derivative of 5,10,15,20-tetra(N-methyl-4-pyridyl)-21*H*,23*H*-porphyrin) and began its characterization. My responsibilities as PI included designing the project, training and overseeing undergraduate students.

Pfizer Summer Undergraduate Research Fellowship

Investigator: Liliya A. Yatsunyk, David Kornfilt, Michelle Ferriera
Period: summer 2008 and 2013 ($5,000/summer)
Synthesis and Characterization of Novel Cationic Porphyrins: Application to Cancer Treatment and Chirality Sensing.

- The summer stipend was awarded to two of my research student, David Kornfilt and Michelle Ferriera, to conduct to conduct synthetic project directed at modification of promising porphyrins in order to improve their G-quadruplex binding affinity.

Swarthmore Grants

Michener Faculty Fellowship
Period: Spring 2015

- This grant covered the second semester of salary from January 2015 till August 2015 while I am on sabbatical at the European Institute of Chemistry and Biology in France in the research group of Jean-Louis Mergny.

Eugene Lang Faculty Fellowship
Period: Spring 2011

- This grant covered the second semester of salary from January 2011 till August 2011 while I was on sabbatical at the European Institute of Chemistry and Biology in France in the research group of Jean-Louis Mergny. In addition, it covered $1,500 for research related expenses for the project involving characterization of quadruplex binding properties of *N*-methylmesoporphyrin IX.

Hungerford grant
Period: 2010-2011; 2022-2023 ($3,000)

- Grant money was used to cover part of the cost associated with attending the *Third International Meeting on G-quadruplex and G-assembly* in Sorrento, Italy (June28 - July 1 2011); a visit to Dr. B. Chaires lab at Brown Cancer Center, University of Louisville (January 2010); and publication cost in an open-access journal, Nucleic Acids Research (2023)

Swarthmore College Research Grant
Period: 2007-current (upward of $1,000)

- This grant is used to cover supplies and reagents necessary to run the laboratory.

HHMI–supported Summer Research Fellowships
Period: 2008-current ($4,350 per student)

- This grant covered summer stipends for Scott Taylor (2008), Erica Evans (2009), Karan Ahluwalia (2010), Steven Barrett (2011), Vienna Tran (2012), Navin Sabharwal (2013), Katherine Bredder (off campus HHMI 2013).

Publications (Swarthmore undergraduate co-authors underlined)

1. K. N. Martin, G. Lam, O. Reznichenko, K. E. Brunner, M. J. Zdilla, S. E. McCarthy, A. Granzhan, L. A. Yatsunyk, *Angew. Chem. Int. Ed*. **2025**, e202501443. https://doi.org/10.1002/anie.202501443

2. Seth, P., Xing, E., Hendrickson, A. D., Li, K., Monsen, R., Chaires, J. B., Neidle, S., Yatsunyk, L. A. Interaction of N-methylmesoporphyrin IX with a hybrid left/right-handed G-quadruplex motif from the promoter of the SLC2A1 gene. *Nucleic Acids Res*. **2025**, *53*, gkae1208 *(equal contribution of the first two authors)*, https://doi.org/10.1093/nar/gkae1208

3. Chen, E., Trajkovski, M., Lee, H.-K., Nyovanie, S., Dean, W. L., Tahiliani, M., Plavec, J., **Yatsunyk, L. A**. Structure of native four-repeat satellite III sequence with non-canonical base interactions. *Nucleic Acids Res*. **2024,** *52*, 3390-3405 https://doi.org/10.1093/nar/gkae113

4. Tran, V. T., Turek-Herman, J., Ferreira, M., Martin, K. N., Beseiso, D., Williams, B. R., Rosu, F., Gabelica, V., Burgmayer, S. J. N., Yatsunyk, L. A. Interactions of ruthenium(II) polypyridyl complexes with human telomeric DNA. *J. Inorg. Biochem.*, **2023**, *249*, 112388

5. Chen, E. V., Nicoludis, J. M., Powell, B. M., Li, K. S., **Yatsunyk, L. A.** Crystal structure of a three-tetrad, parallel, K^+-stabilized human telomeric G-quadruplex at 1.35 Å resolution. *Acta Cryst. F*, **2023**, *F79*, 144–150.

6. Li, K. S., Jordan, D., Lin, L. Y., McCarthy, S. E., Schneekloth, J. S., **Yatsunyk, L. A**. Crystal Structure of an i-Motif from the HRAS Oncogene Promoter *Angew. Chem. Int. Ed.* **2023**, e202301666.

7. Ye M.; Chen, E. C.; Pfeil, S. H.; Martin, K. N.; Atrafi, T.; Yun, S.; Martinez, Z.; **Yatsunyk, L. A.** Homopurine guanine-rich sequences in complex with N-methyl mesoporphyrin IX form parallel G-quadruplex dimers and display a unique symmetry tetrad *Bioorg. Med. Chem.* **2023**, *77*, 117112 https://doi.org/10.1016/j.bmc.2022.117112

8. Li K.; **Yatsunyk L. A.**; Neidle S. Machine learning shows torsion angle preferences in left-handed and right-handed quadruplex DNAs *Biophysical J.*, **2022**, 121, 4874–4881, doi.org/10.1016/j.bpj.2022.08.021.

9. Beseiso, D.; Chen, E. V.; McCarthy, S. E.; Martin, K. N.; Gallagher, E. P.; Miao, J.; and **Yatsunyk, L. A.** The First Crystal Structures of Hybrid and Parallel Four-Tetrad Intramolecular G-Quadruplexes *Nucleic Acids Res.*, **2022**, *50*, 2959–2972.

10. Li, K.; **Yatsunyk, L. A**.; Neidle, S. Water spines and networks in G-quadruplex structures *Nucleic Acids Res.* **2021**, *49(11)*, 519-528. https://doi.org/10.1093/nar/gkaa1177

11. Lin, L. Y.; McCarthy, S.; Powell, B. M.; Manurung, Y.; Xiang I. M.; Dean, W. D.; Chaires, B.; **Yatsunyk, L. A.** Biophysical and X-ray structural studies of the $(GGGTT)_3GGG$ G-quadruplex in complex with *N*-methyl mesoporphyrin IX *PLOS ONE*, **2020**, *15*(11): e0241513. https://doi.org/10.1371/journal.pone.0241513

12. Johnson, F. B.; and **Yatsunyk, L. A.** G-quadruplexes in fibrotic scars may open new therapeutic avenues for wound healing *FEBS Let.,* **2019**, *594*, 19-20.

13. Yett, A.; Lin L. Y.; Beseiso, D.; Miao, J., and **Yatsunyk, L. A.** N-methyl mesoporphyrin IX as a highly selective light-up probe for G-quadruplex DNA. *J. Porphyr. Phthalocya.* Contribution to Women in Porphyrin Sciences Special Issue (* *equal contributions of all authors)*, **2019**, *23*, 1195-1215.

14. Falabella, X. M.; Kolesar, J. E.; Wallace, C,; de Jesus, D., Sun, L.; Taguchi, Y. V.; C. Wang, C.; Wang, T.; Xiang, I. M.; Alder, J. K.; Maheshan, R.; Horne, W.; Turek-Herman, J.; Pagano, P. J.; St. Croix, C. M.; Sondheimer, N; **Yatsunyk, L. A.**; Johnson F.B.; and Kaufman B. A. G-quadruplex dynamics contribute to regulation of mitochondrial gene expression *Sci Rep.,* **2019**, *9*, 5605-5621.

15. Naeem M. M.; Maheshan R.; Costford S. R.; Wahedi A.; Trajkovski M.; Plavec J.; **Yatsunyk L. A.;** Ciesielski G. L.; Kaufman B. A.; Sondheimer N. G-Quadruplex Mediated Reduction of a Pathogenic Mitochondrial Heteroplasmy. *Hum. Mol. Genet*. **2019**, 28, 3163-3174.

16. Sabharwal, N. C.; Chen, J.; Lee, J. H.; Gangemi, C. M. A., D'Urso, A.; and **Yatsunyk, L. A**. Interactions between spermine-derivatized tentacle porphyrins and the human telomeric DNA G-quadruplex *Int. J. Mol. Sci.* **2018**, *19*, 3686.

17. Shastri, N.; Tsai, Y-Ch.; Hile, S.; Jordan, D.; Powell, B.; Chen, J.; Maloney, D.; Dose, M.; Lo, Y.; Anastassiadis, T.; Rivera, O.; Kim T.; Shah, S.; Borole, P.; Asija, K.; Wang, X.; Smith, K. D.; Finn, D.; Schug, J.; Casellas, R.; **Yatsunyk, L. A**.; Eckert, K. A.; and Brown, E. J. Genome-wide identification of structure-forming repeats as principal sites of fork collapse upon ATR inhibition *Mol. Cell* **2018**, *72*, 222-238.e21.

18. Guédin, A.; Lin, Y.; Armane, S.; Mergny, J. -L.; Thore, S.; **Yatsunyk, L. A.** Crystal structure of G-rich sequence from the *Dictyostelium discoideum* genome: a four quartet G-quadruplex *Nucleic Acids Res.* **2018**, *46(10)*, 85297-5307 (*equal contributions of two first authors).*

19. Kerkour A.; Marquevielle, J.; Ivashchenko, S.; **Yatsunyk, L. A.**, Mergny, J.-L.; Salgado, G. High-resolution 3D NMR structure of the KRAS proto-oncogene promoter reveals key features of a G-quadruplex involved in transcriptional regulation *J. Biol. Chem.* **2017**, *292(19)*, 8082-8091.

20. Ruan, T.; Davis, S.; Powell, B.; Harbeck, C.; Habdas, J.; Habdas, P.; **Yatsunyk, L. A.** Lowering the overall charge on TMPyP4 improves its selectivity for G-quadruplex DNA *Biochimie* **2017**, *132*, 121-130.

21. Boschi, E.; Davis, S.; Taylor, S.; Butterworth, A.; Chirayath, L. A.; Purohit, V.; Siegel, L. K.; Buenaventura, J.; Sheriff, A. H.; Jin, R.; Sheardy, R.; **Yatsunyk, L. A.**; and Azam, M. Interaction of a cationic porphyrin and its metal derivatives with G-quadruplex DNA *J. Phys. Chem. B* **2016**, *120 (50)*, 12807-12819 *(equal contribution of two last authors).*

22. **Yatsunyk, L. A.**, Monchaud, D., and Sen, D. Blending Quadruplexes and Bordeaux: a Grand Cru! The 5th International Meeting on Quadruplex Nucleic Acids, Bordeaux (France) *Cell Chem. Bio.* **2016**, *23(3)*, 320-329.

23. Sabharwal, N.C.; Mendoza, O.; Nicoludis, J. M.; Ruan, T.; Mergny, J. -L. **Yatsunyk, L. A.** Investigation of the interactions between Pt(II) and Pd(II) derivatives of 5,10,15,20-tetrakis (*N*-methyl-4-pyridyl) porphyrin and G-Quadruplex DNA *J Biol. Inorg. Chem.* **2016**, *21(2)*, 227-239.

24. Dong, D. W.; Filipe Pereira, F.; Barrett, S. P.; Kolesar, J. E.; Cao, K.; Damas J.; **Yatsunyk, L. A.**; Johnson F. B.; Kaufman, B. A. Association of G-quadruplex forming sequences with human mtDNA deletion breakpoints *BMC Genomics* **2014**, *15*, 677-691.

25. **Yatsunyk, L. A.**; Mendoza, O.; Mergny, J.-L. Nano-oddities": Unusual nucleic acid assemblies for DNA-based nanostructures and nanodevices *Acc. Chem. Res.* **2014**, *47*, 1836-1844.

26. Sabharwal, N. C.; Savikhin, V.; Turek-Herman, J. R.; Nicoludis, J. M.; Szalai, V. A.; **Yatsunyk, L. A.** N-methylmesoporphyrin IX fluorescence as a reporter of strand orientation in guanine quadruplexes *FEBS J.* **2014**, *281(7)*, 1726-1737.

27. Renaud de la Faverie, A.; Guédin, A.; Bedrat, A.; **Yatsunyk, L. A.**; Mergny, J.-L. Thioflavin T as a fluorescence light-up probe for G4 formation *Nucleic Acids Res.* **2014**, e65.

28. **Yatsunyk, L. A.**; Piétrement, O.; Albrecht, D.; Tran, P. L. T.; Renčiuk, D.; Sugiyama, H.; Arbona, J.-M.; Aimé, J.-P.; Mergny, J.-L. Guided assembly of tetramolecular G-quadruplexes *ACS Nano* **2013**, *7*, 5701-5710.

29. Nicoludis, J. M.; Miller, S.; Jeffrey, P.; Barrett, S. P.; Rablen, P. R.; Lawton, T.; **Yatsunyk, L. A.** Optimized end-stacking provides specificity of *N*-methyl mesoporphyrin IX for human telomeric G-quadruplex DNA *J. Am. Chem. Soc.* **2012**, *134* (50), 20446-20456.

30. **Yatsunyk, L. A.**; Bryan, T.; Johnson, F. B. G-ruption: The third international meeting on G-quadruplex and G-assembly *Biochimie* **2012**, *94*, 2475-2483.

31. Nicoludis, J. M.; Barrett, S. P.; Mergny, J.-L.; **Yatsunyk, L. A.** Interaction of human telomeric DNA with *N*-methyl mesoporphyrin IX *Nucleic Acids Res.* **2012**, *40*, 5432-5447.

32. Bhattacharjee, A. J.; Ahluwalia, K.; Taylor, S.; Jin, O.; Nicoludis, J. M., Buscaglia, R.; Chaires, J. B.; Kornfilt, D. J. P; Marquardt, D. G. S., **Yatsunyk, L. A**. Induction of G-quadruplex DNA structure by Zn(II) 5,10,15,20-tetrakis(*N*-methyl-4-pyridyl)porphyrin *Biochimie* **2011**, *93*, 1297-1309.

33. Smith, J. S.; Chen, Q.; **Yatsunyk, L. A.**; Nicoludis, J. M.; Garcia, M. S.; Kranaster, R.; Balasubramanian, S.; Monchaud, D.; Teulade-Fichou, M.-P.; Abramowitz, L.; Schultz, D. C.;

and Johnson, F. B. Rudimentary G-quadruplex-based telomere capping in *Saccharomyces cerevisiae Nat. Struct. Mol. Biol.* **2011**, *18*, 478–485.

34. Benítez, J. J.; Keller, A. M.; Huffman, D. L.; **Yatsunyk, L. A.**; Rosenzweig, A. C.; Chen P. Relating dynamic protein interactions of metallochaperones with metal transfer at the single-molecule level *Faraday Discuss.* **2011**, *148*, 71-82; discussion 97-108.

35. Mergny, J.L., **Yatsunyk, L.**, Guédin, A., Gros, J., Renaud de la Faverie, A., Smith, N., Renciuk, D., Tran, P.L.T., Bourdoncle, A. DNA quadruplexes for bio- and nano-technologies *Conference proceedings*, Chemistry of Nucleic Acid Components – Collection symposium series, **2011**, *12*, 218-221. 15th Symposium on Chemistry of Nucleic Acid Components, Jun 05-10, 2011 Cesky Krumlov, Czech Republic.

36. Balasubramanian, R.; Smith, S. M.; Rawat S.; **Yatsunyk, L. A.**; Stemmler, T. L.; Rosenzweig, A. C. Oxidation of methane by a biological dicopper center *Nature* **2010**, *465*, 115-119.

37. Banci, L.; Bertini, I.; Cantini, F.; Rosenzweig A. C.; **Yatsunyk, L. A.** Solution structure and interaction with the copper(I) chaperone HAH1 of the third and forth domain of human ATP7B *Biochemistry* **2008**, *47*, 7423-7429.

38. Benitez, J. J.; Keller, A. M.; Ochieng, P.; **Yatsunyk, L. A**.; Huffman, D. L.; Rosenzweig, A. C.; Chen, P. "Probing Transient Copper Chaperone-Wilson Disease Protein Interactions at the Single-Molecule Level with Nanovesicle Trapping" *J. Am. Chem. Soc. (Communication)* **2008**, *130*, 2446-2447.

39. **Yatsunyk, L. A.**; Easton, J. A.; Kim, L. R.; Sugarbaker, S. A.; Bennett, B.; Breece, R. M.; Vorontsov, I. I.; Tierney, D. L.; Crowder, M. W.; Rosenzweig, A. C. "Structure and metal binding properties of ZnuA, a periplasmic zinc transporter from *Escherichia coli*" *J. Biol. Inorg. Chem.* **2008**, *13*, 271-288.

40. **Yatsunyk, L. A.**; Rosenzweig, A. C. "Copper(I) Binding and Transfer by the N-terminus of the Wilson Disease Protein" *J. Biol. Chem.* **2007**, *282*, 8622-8631.

41. Weeler, K.; Nocek, J. M.; Cull, D.; **Yatsunyk, L. A.**; Rosenzweig, A. C.; Hoffman, B. M. "Dynamic Docking of Cytochrome *b5* With Myoglobin and β-Hemoglobin: Heme-Neutralization 'Squares' and the Binding of Electron-Transfer-Reactive Configurations" *J. Am. Chem. Soc.* **2007**, *129*, 3906-3917.

42. Teschner, T.; **Yatsunyk, L. A.**; Schünemann, V.; Hu, C.; Scheidt, W. R.; Walker, F. A.; Trautwein, A. X. "Low-Spin Ferriheme Models of the Cytochromes: Mössbauer Spectra of Six Crystalline Complexes Having Axial Ligand Plane Dihedral Angles Ranging from 0^o to 90^o" *J. Am. Chem. Soc.* **2006**, *128*, 1379-1389.

43. **Yatsunyk, L. A.**; Dawson, A.; Carducci, M. D.; Walker, F. A. "Models of the Cytochromes: Crystal Structures and EPR Spectral Characterization of Low-Spin Bis-Imidazole Complexes of (OETPP)Fe^{III} Having Intermediate Ligand Plane Dihedral Angles" *Inorg. Chem.* **2006**, *45*, 5417-5428.

44. **Yatsunyk, L. A.**; Walker, F. A. "Synthesis and characterization of the iron(III) complexes of tetra-(β,β'-tetramethylene)tetraphenylporphyrin, (TC_6TPP)FeCl and (TC_6TPP)$FeONO_2$" *J. Porph. Phthal*. **2005**, *9*, 214-228.

45. **Yatsunyk, L. A.**; Ogura, H.; Walker, F. A. "Kinetics of Ring Inversion in Strongly Non-Planar Iron(III) Octaalkyltetraphenylporphyrinates" *Inorg. Chem*. **2005**, *44*, 2867-2881.

46. **Yatsunyk, L. A.**; Shokhirev, N, V.; Walker, F. A. "Magnetic Resonance Spectroscopic Investigations of the Electronic Ground and Excited States in Strongly Non-Planar Iron(III) Dodecasubstituted Porphyrins" *Inorg. Chem*. **2005**, *44*, 2848-2866.

47. Cai, S.; Belikova, E.; **Yatsunyk, L. A.**; Stolzenberg, A. M.; Walker, F. A. "Magnetic Resonance Investigations of Mono-Oxo-Octaethylchlorinatoiron(III) Chloride and Its Bis-Imidazole Complex" *Inorg. Chem.* **2005**, *44*, 1882-1889.

48. Teschner, T.; Trautwein, A. X.; Schünemann, V.; **Yatsunyk, L. A.**; Walker, F. A. "Low-Spin Ferriheme Models of the Cytochromes: Correlation of Molecular Structure with EPR and Mossbauer Spectral Parameters" *Hyperfine Interactions* **2004**, *156/157*, 285-291.

49. Abajian, C.; **Yatsunyk, L. A.**; Ramirez, B. E.; Rosenzweig, A. C. "Solution Structure and Binding of Copper(I) by Yeast Cox17" *J. Biol. Chem.* **2004**, *279*, 53584-53592.

50. Wernimont, A. K; **Yatsunyk, L. A.**; Rosenzweig, A. C. "Binding of copper(I) by the Wilson disease protein and its copper chaperone" *J. Biol. Chem.* **2004**, *279*, 12269-12276.

51. **Yatsunyk, L. A.**; Walker, F. A. "NMR and EPR Spectroscopic and Structural Studies of Low-Spin, $(d_{xz},d_{yz})^4(d_{xy})^1$ Ground State Fe(III) bis-(tert-Butylisocyanide) Complexes of Dodecasubstituted Porphyrins" *Inorg. Chem*. **2004**, *43*, 4341-4352.

52. **Yatsunyk, L. A.**; Walker, F. A. "Structural, NMR, and EPR Studies of S = 1/2 and S = 3/2 Fe(III) Bis(4-Cyanopyridine) Complexes of Dodecasubstituted Porphyrins" *Inorg. Chem.* **2004**, *43*, 757-777.

53. **Yatsunyk, L. A.**; Carducci, M. D.; Walker, F. A. "Low-Spin Ferriheme Models of the Cytochromes: Correlation of Molecular Structure with EPR Spectral Type" *J. Am. Chem. Soc.* **2003**, *125*, 15986-16005.

54. **Yatsunyk, L. A.**; Walker, F. A. "^{19}F Isotropic Shifts in Paramagnetic Iron(III) Octaethyltetraphenylporphyrinate and Tetraphenylporhyrinate Complexes of a Variety of

Electronic Ground States: Implication for the Electron Configuration of Chloroiron Tri-(pentafluorophenyl)corrolate" *Inorg. Chim. Acta* **2002**, *337*, 266-274.

55. Ogura, H.; **Yatsunyk, L. A.**; Medforth, C. J.; Smith, K. M.; Barkigia, K. M.;Renner, M. W.; Melamed, D.; Walker, F. A. "Molecular Structures and Magnetic Resonance Spectroscopic Investigations of Highly Distorted Six-Coordinate Low-Spin Iron(III) Porphyrinate Complexes" *J. Am. Chem. Soc.* **2001**, *123,* 6564-6578.

56. Panchuk, O.; Savitsky, A.; Fochuk, P.; Nykonyk, Ye.; Parfenyuk, O.; Shcherbak, L.; Ilashcuk, M.; **Yatsunyk, L. A.**; Feychuk, P. "IV group dopant compensation effect in CdTe," *J. Cryst. Growth* **1999,** *197*, 607-611.

57. Fochuk, P. M.; Panchuk, O. E.; Kochergan, V. I.; **Yatsunyk, L. A.** "High-temperature defects equilibria in Cu-doped CdTe" *Neorg. Mater.* **1996**, *32*, 1356-1358.

Invited Talks

1. DNA sequences with the potential to form five-tetrad G-quadruplexes, June 2-6, **2025**, *G4thering: 9th International G4 Conference*, Minneapolis, USA
2. Formation of left-handed G4s and their interactions with a traditional G4 ligand, N-methylmesoporphyrin IX, October 23-25, **2024**, *Advances in Non-canonical Nucleic Acid meeting*, Portoroz, Slovenia
3. DNA sequences with the potential to form five-tetrad G-quadruplexes, June 2-6, **2025**, *G4thering: 9th International G4 Conference*, Minneapolis, USA
4. Small but mighty: How small molecule ligands reshape DNA structures. September 23, **2024,** Drexel University College of Medicine, PA, USA
5. Non-canonical DNA structures and their interactions with small molecule ligands. April 14, **2022**, Temple University, PA
6. Biophysical and structural investigations of non-canonical DNA implicated in cancer and other diseases. *Slovenian-American Science Symposium*, Oct 30, **2021**, Washington DC, Slovenian Embassy
7. Structure and biophysical properties of non-canonical DNA alone and with ligands. Oct 1st **2021**, Haverford College, PA.
8. Non-canonical DNA structures and their interactions with small molecule ligands. August 14-21, **2021**, *International Union of Crystallography (IUCr-2021)*, hybrid conference, Prague, Czech Republic.
9. Porphyrins and G-quadruplex DNA – a long lasting union. June 28-July 3, **2021**, *International Conference on Porphyrins and Phthalocyanines*, ICPP-11, virtual meeting.
10. Structural studies of non-canonical DNA in complex with porphyrin ligands. February 10, **2020**, Department of Chemistry and Biochemistry, *University of the Sciences*, Philadelphia PA.

11. Structural studies of non-canonical DNA in complex with porphyrin ligands. November 9, **2019**, *Philadelphia Inorganic Colloquium*, St. Joseph University, Philadelphia PA.
12. Deviant DNA and the lessons we learn. October 2nd, **2019**, *Swarthmore College faculty lunch,* Swarthmore, PA
13. Biophysical and structural investigations into CAGAGG repeats associated with cancer September 11, **2019**, Department of Chemistry, *West Virginia University*, WA.
14. Structural and biophysical studies of GQ DNA in complex with porphyrin ligands, April 30, **2019**, Department of Chemistry, University of Strasbourg, France.
15. Structural and biophysical studies of non-canonical DNA implicated in replication stress, April 29, **2019**, Kaiserslautern University, Germany.
16. Structural and biophysical studies of non-canonical DNA implicated in replication stress, April 10, **2019**, Institute Curie, Orsay, France.
17. Structural and biophysical studies of GQ DNA in complex with porphyrin ligands, November 16, **2018**, *Univerza v Ljubljani Fakulteta za kemijo in kemijsko tehnologijo*, Ljubljana, Slovenia; December 4, **2018**, *University of Naples, Frederico II*, Italy.
18. Biophysical and structural investigations into CAGAGG repeats associated with cancer November 6, **2018**, *Institute of the Biophysics of the Czech Academy of Sciences*, Brno, and November 9, **2018**, *Institute of Organic Chemistry and Biochemistry*, Prague, Czech Republic; November 29, **2018**, *University of Catania*, Italy.
19. Biophysical and structural investigations into CAGAGG repeats associated with cancer October 25-27, **2018**, *Advances in Non-canonical Nucleic Acid*, Portoroz, Slovenia
20. Biophysical and structural investigations into CAGAGG repeats associated with cancer October 11, **2018**, *Slovenian NMR center*, Ljubljana, Slovenia
21. Biophysical and structural investigations of non-canonical DNA implicated in cancer August 30, **2018**, *The University of Alabama*, Tuscaloosa, AL
22. Structural studies of non-canonical DNA in complex with porphyrin ligands July 1-6, **2018**. *International Conference on Porphyrins and Phthalocyanines*, ICPP-10, Munchen, Germany
23. Structural studies of CAGAGG repeats from difficult-to-replicate regions of the mammalian genome. May 5, **2018**, *11th Frontiers in Chemistry and Biology Symposium, FCBIS*, University of Pennsylvania, Philadelphia, PA, USA
24. Unusual DNA: How does it look like? January 3, **2018**, *Chernivtsi State University*, Chemistry, Chernivtsi, Ukraine
25. Structural investigation of non-canonical DNA implicated in cancer, February 17, **2017**, *Ursinus College*, Chemistry, Collegeville, PA
26. Investigation of the secondary structure of CAGAGG repeats overrepresented at replication fork collapse sites, July 17, **2015,** *U869 meeting*, Bordeaux, France
27. The tale of NMM, my favorite G-quadruplex ligand. March 11, **2015** *Northampton University;* March 12, **2015** *Imperial College, London;* March 16, **2015** *University College London,* UK; May 29 **2015** *University of Toulouse*

28. Interaction of Ru(II) polypyridyl complexes with human telomeric DNA GQ. February 19 **2015**. *Chemistry meets Biology.* IECB, Bordeaux, France.
29. Interactions between human telomeric DNA and G-quadruplex specific ligand, NMM. February 10, **2015**. *PGIG meeting*, University of Pennsylvania, Medical School, Philadelphia, USA.
30. The story of NMM, my favorite G-quadruplex ligand. November 28, **2014**, *U869 meeting*, Bordeaux, France.
31. Polypyridyl ruthenium complexes as G-quadruplex DNA ligands. July 30, **2014**. *Mid-Atlantic Seaboard Inorganic Symposium*, Temple University. The talk was delivered by the undergraduate student, Josh Turek-Herman
32. Interactions between human telomeric DNA and quadruplex specific ligand, N-methylmesoporphyrin IX, NMM. June 22-27, **2014**. *International Conference on Porphyrins and Phthalocyanines*, ICPP-8, Istanbul, Turkey
33. Interactions between human telomeric DNA and quadruplex specific ligand, N-methylmesoporphyrin IX, NMM. April 16, **2013**. *The Florida State University, Chemistry and Biochemistry*, Tallahassee, FL, USA
34. Interactions between human telomeric DNA and quadruplex specific ligand, N-methylmesoporphyrin IX, NMM. January 17, **2013**. *University of Nevada, Reno, Department of Chemistry*, Reno, NV, USA
35. Interactions between human telomeric DNA and N-methylmesoporphyrin IX, NMM. October 10, **2012**. *St. Joseph's University, Department of Chemistry*, Philadelphia, PA, USA
36. Interactions between human telomeric DNA and N-methylmesoporphyrin IX, NMM. September 27, **2012**. *Kent State University, Department of Chemistry and Biochemistry*, Kent, OH, USA.
37. Interactions between human telomeric DNA and N-methylmesoporphyrin IX, NMM. September 25, **2012**. *University of Akron, Department of Chemistry*, Akron, OH, USA.
38. Two faces of quadruplex DNA- drug target and DNA nanomaterial. March 7, **2012**. *Wake Forest University, Department of Chemistry*, Winston-Salem, NC, USA.
39. Using parallel-stranded duplexes to control formation of parallel-stranded G-quadruplexes. August 8, **2011**, *U869 meeting*, Bordeaux, France.
40. N-methyl porphyrins: Highly selective G-quadruplex DNA ligands. September 24, **2011**, *8th Undergraduate Fall Research Symposium at Haverford College*, Haverford, PA, USA. The talk was presented by my student, Jack Nicoludis.
41. Deviant DNA: When the exception becomes the rule. September 21, **2011**, *Swarthmore College faculty lunch*, Swarthmore, PA USA.
42. Two faces of quadruplex DNA- drug target and DNA nanomaterial. September 15, **2011**. *Swarthmore College Department of Chemistry and Biochemistry*, Swarthmore, PA, USA
43. Stabilization and Structural Rearrangement of Human Telomeric GQ DNA by NMM. June 27, **2011**, *University of Catania*, Catania, Italy.

44. Stabilization of human and yeast telomeric G-quadruplexes by core-methylated porphyrins. April 19, **2011**, *Troisième journée thématique de l'Equipe Chimie Biologique, Université Paul Sabatier*, Toulouse, France.
45. Synthesis, Structure, and Magnetic Spectroscopies of Non-Planar Hemes as Models of the Cytochrome *b* Heme Centers. May 31, **2008**, *Drexel University*, Philadelphia, PA, USA.
46. Synthesis, Structure, and Magnetic Spectroscopies of Non-Planar Hemes as Models of the Cytochrome *b* Heme Centers. March 7, **2008**, *Binghamton University*, Binghamton, NY, USA.

Oral Presentations at Scientific Meetings

1. Interaction of NMM with GQ DNA, June 23-38, **2024**, *International Conference on Porphyrin and Phthalocyanines*, Niagara Falls, NY, USA
2. Structural plasticity of telomeric DNA from *Tetrahymena thermophila*, June 8, **2023** *Nucleic acids secondary structures: G4s and beyond* Webinar Series 2023, part X.
3. X-ray Structure of non-canonical DNA from telomeres of *Tetrahymena thermophila*, June 1-4, **2022**, *the 50th Middle Atlantic Regional Meeting of the American Chemical Society*, the College of New Jersey, NJ, USA
4. Structure of non-canonical DNA from *Tetrahymena thermophila* alone and with N-methylmesoporphyrin ligand, April 5-30, **2021**, *ACS Spring Virtual Meeting and Exposition*.
5. Structure of non-canonical DNA from *Tetrahymena thermophila* and beyond, Sept 17, **2020** *Nucleic acids secondary structures: G4s and beyond* Webinar Series 2020-part II
6. Structural studies of CAGAGG repeats from difficult-to-replicate regions of mammalian genome September 25-27, **2018**, 8*BIONIC*, Padua, Italy. Short oral presentation to highlight the poster
7. Structural studies of CAGAGG repeats from difficult-to-replicate regions of the mammalian genome. August 19-23, **2018**, *ACS National Meeting*, Boston, MA
8. Structural studies of CAGAGG repeats from difficult-to-replicate regions of the mammalian genome *FASEB Dynamic DNA Structures in Biology* July 8-13, **2018**, Olean NY,
9. Structure and functions of CAGAGG repeat. August 20-25, **2016**, *252nd ACS National Meeting*, Philadelphia, PA
10. The tale of NMM, my favorite G-quadruplex ligand. *5th International Meeting on Quadruplex Nucleic Acids: G4thering in Bordeaux.* May 26-28, **2015**, Bordeaux, France
11. Sabharwal, N. C.; Savikhin, V.; Turek-Herman, J. R.; Nicoludis, John M.; **Yatsunyk, L. A.**; Mendez, M.; Szalai, V. A. Guanine Quadruplex DNA Nanomaterials. August 8, **2014** *Mid-Atlantic DNA Nanotechnology Symposium*, Johns Hopkins University, USA. The talk was delivered by Veronika Szalai
12. Molecular details of interaction between human telomeric DNA and quadruplex specific ligand, N-methylmesoporphyrin IX. August 19-23, **2012**, *244st ACS National Meeting*, Philadelphia, PA

13. Using parallel-stranded duplexes to control formation of parallel-stranded G-quadruplexes. August 8, **2011**, *XXIst General Congress of French Physics Society, Minicolloquium 8: Nanoscience and Health,* Bordeaux, France
14. Using parallel-stranded duplexes to control formation of parallel-stranded G-quadruplexes. June 29, **2011**, *Third International Meeting on GQ and G-assembly*, Sorrento, Italy.
15. Using parallel-stranded duplexes to control formation of parallel-stranded G-quadruplexes. Jan 11-13, **2011**, *U869 retreat*, Cauterets, France
16. Induction of parallel G-quadruplex DNA structure of $(TAG_3)_2$ by ZnT4. May 18-21, **2010**, *National Science Foundation – 2010 Inorganic Chemistry Workshop*, Santa Fe, NM
17. Copper(I) binding and transfer by the N-terminus of the Wilson disease protein. March 26-30, **2006**, *231st ACS National Meeting*, Atlanta, GA
18. Models of the cytochrome bc_1 heme centers: Correlation of EPR and Mössbauer parameters with axial ligand plane dihedral angle. March 26-30, **2006**, *231st ACS National Meeting*, Atlanta, GA
19. Synthesis, Structure and Magnetic Spectroscopies of Non-Planar Hemes as Models of the Cytochromes *b* Heme Centers. February 6-9, **2003**, *Gordon Research Conferences, Graduate Research Seminar: Bioinorganic Chemistry*, Ventura, CA
20. Kinetic Studies of Ring Inversion in Paramagnetic Non-Planar Porphyrinato Complexes of High- and Low-Spin Iron(III) by NMR Techniques. September 23-26, **2002**, *SMASH (Small Molecules Are Still Hot)*, Breckenridge, CO

Discussion leader at National and International meetings

1. Session Chair, Graduate Student Symposium, Biological Chemistry, August 22, **2022**, Fall *ACS National Meeting*, virtual session
2. Discussion Leader of the session on DNA and RNA at the Division of Inorganic Chemistry, Bioinorganic Chemistry. August 19-23, **2018**, Fall *ACS National Meeting*, Boston, MA
3. Discussion Leader of the session on DNA and RNA at the Division of Inorganic Chemistry, Bioinorganic Chemistry. August 20-25, **2016**, Fall *ACS National Meeting*, Philadelphia, PA
4. Discussion Leader of the session Navigating the Landscape: Structure Folding and Thermodynamics Proteins at the Gordon Research Conference on Metals in Biology: Graduate Student Seminar. January 28-31, **2016**, Ventura, CA
5. Discussion Leader of Poster flash presentation session at the 5th international meeting on quadruplex nucleic acids: G4 gathering in Bordeaux, May 26-28 **2015**, Bordeaux, France.
6. Discussion Leader of the session on DNA and RNA at the Division of Inorganic Chemistry, Bioinorganic Chemistry at the 244st ACS National Meeting, August 19-23, **2012**, Philadelphia, PA
7. Discussion Leader of the session Heme Proteins Structure and Function at the Gordon Research Conference on Metals in Biology. January 20-25, **2013**, Ventura, CA

Oral presentations by students

1. Andrew Hendrickson ’27 Crystallization and Characterization of Intramolecular Left-Handed G-Quadruplexes, May 29 **2025**, *the 53d Middle Atlantic Regional Meeting of the American Chemical Society*, Seton Hall University, NJ
2. Abdullah Ali ’25 Crystallization of TET25 in complex with TrisQO, March 29th, **2025**, *the 88th Annual Intercollegiate Student Chemists Convention*, Muhlenberg College, PA
3. Andrew Hendrickson ’27 Crystallization of Intramolecular Left-Handed G-Quadruplexes, March 29th, **2025**, *the 88th Annual Intercollegiate Student Chemists Convention*, Muhlenberg College, PA
4. Eric Xing ’26 Investigation of a Hybrid LH-RH G-Quadruplex, March 29th, **2025**, *the 88th Annual Intercollegiate Student Chemists Convention*, Muhlenberg College, PA
5. Joseph Eyiolowope ’25 DNA sequences with the potential of forming 5 tetrad G-quadruplexes, March 29th, **2025**, *the 88th Annual Intercollegiate Student Chemists Convention*, Muhlenberg College, PA
6. Eric Xing ‘26 Investigation of a Hybrid LH-RH G-Quadruplex, June 5-8, **2024**, *the 52nd Middle Atlantic Regional Meeting of the American Chemical Society*, Pennsylvania State University in University Park, PA.
7. David (Ming) Ye ’23 Homopurine G-quadruplexes in complex with *N*-methyl mesoporphyrin display a novel ‘symmetry tetrad’. March 30th, **2023**, Ph.D. contest at *Nucleic acids secondary structures: G4s and beyond* Webinar Series, Part VIII, Virtual. **The winner.**
8. Kailey Martin, Small but mighty - $PyDH_2$ intercalation sparks big conformational change in TET25 G-quadruplex, Apr 7, **2023**, Ursinus College, Collegeville, PA 19426. Invited talk.
9. Erin Chen ’23 Non-canonical structural motifs in Satellite III DNA repeats June 1-4, **2022**, *the 50th Middle Atlantic Regional Meeting of the American Chemical Society*, the College of New Jersey, NJ, USA
10. Dana Beseiso ’21 Biophysical and Structural Characterization of N-Methyl Mesoporphyrin IX in Complex with Telomeric G-Quadruplex DNA. June 28-July 3, **2021**, *International Conference on Porphyrins and Phthalocyanines*, ICPP-11, virtual meeting
11. Kevin Li ’22 Water networks in G-quadruplexes, April 5-30, **2021**, *ACS Spring Virtual Meeting and Exposition*
12. Erin Chen ’23 Elucidating the structure of a four-repeat Satellite III DNA sequence, April 5-30, **2021**, *ACS Spring Virtual Meeting and Exposition*
13. Dana Beseiso ’21 Biophysical Characterization and X-ray crystallography of G-quadruplex telomeric sequences from *Tetrahymena thermophila*, **2020** Fall, *ACS Virtual Meeting and Exposition.*
14. Dana Beseiso ’21 Structural studies on telomeric *Tetrahymena thermophila* sequences, November 9, **2019**, *Philadelphia Inorganic Colloquium*, St. Joseph University, Philadelphia PA

15. Linda Lin ´20 Crystal structure and biophysical studies of telomeric G-quadruplex DNA with a small molecule ligand, April 6, **2019**, *Annual Intercollegiate Student Chemists Convention*, Gettysburg, PA

16. Deondre Jordan ´19 Pursuing the secondary structure of cancer-related DNA repeats using biophysical methods. August 19-23, **2018**, *ACS National Meeting*, Boston, MA

17. Linda Lin ´20 Interaction of G-quadruplex DNA with NMM as an anticancer strategy. Apr 7, **2018**, *Intercollegiate Student Chemists Convention*, Elizabethtown, PA. **2nd place for the best Biochemistry talk**

18. Deondre Jordan ´19 Biophysical efforts toward the secondary structure of DNA repeats associated with replication stress. Apr 7, **2018**, *Intercollegiate Student Chemists Convention*, Elizabethtown, PA.

19. Linda Lin ´20 Interaction of telomeric DNA with NMM as an anticancer strategy. Sept 23, **2017**, *14th Undergraduate Fall Research Symposium,* Haverford College, Haverford, PA

20. Deondre Jordan ´19 Mutagenesis study of intrinsically difficult-to-replicate tandem DNA sequences implicated in cancer. Aug 20-24, **2017**, *254th ACS National Meeting*, Washington, DC

21. Barrett Powell ´18 Efforts toward the crystal structure of CAGAGG repeats. Aug 20-24, **2017**, *254th ACS National Meeting*, Washington, DC

22. Deondre Jordan ´19 Investigating the secondary structure of non-canonical DNA implicated in Cancer. Nov 9-12 **2016**, *Annual Biomedical Conference for Minority Students (ABRCMS)*, Tampa FL. Recognized by the Biochemistry Award.

23. Barrett Powell ´18 Pursuing the Secondary Structure of CAGAGG Repeat. August 20-25, **2016**, *252nd ACS National Meeting*, Philadelphia, PA

24. Josh Turek-Herman ´16 at Mid-Atlantic Seaboard Inorganic Symposium at Temple, July **2014**

25. Steven Barrett ´13 and Michelle Ferreira ´14 Structural considerations of the NMM-Tel22 complex. Sept 22, **2012**, *9th Undergraduate Fall Research Symposium,* Haverford College, Haverford, PA

26. Jack Nicoludis ´12, Sept **2011**, *9th Undergraduate Fall Research Symposium*, Haverford College, Haverford, PA

Poster Presentations at National and International Meetings
(undergraduate co-authors underlined; presenters are marked with *)

1. Kailey N. Martin*, L.A. Yatsunyk, Biophysical characterization and crystallization of HIF-1A construct EK June 27-July 1, **2022**, *8th International Meeting on Quadruplex Nucleic Acids*, Marienbad, Czech Republic
2. Dana Beseiso '21* Biophysical and structural characterization of Tetrahymena thermophila G-Quadruplexes alone and in complex with N-methyl mesoporphyrin IX, April 5-30, **2021***ACS Spring Virtual Meeting and Exposition*

3. Dana Beseiso '21* Biophysical Characterization and X-ray Crystallography of Telomeric G-Quadruplex Structures from *Tetrahymena thermophila. Nov 9-13* **2020**, virtual *Annual Biomedical Research Conference for Minority Students (ABRCMS).* **Presenter awardee in the division of Biochemistry and Molecular Biology.**

4. Rubien, J.* Yatsunyk L. A. RNA-Protein Phase Separation in Cancer: Investigating Human Satellite II RNA Structure and Function. February 15-19 **2020**, *64th Annual Meeting of the Biophysical Society* San Diego, CA. **Undergraduate Poster Award Competition Winner**

5. Lee H. K.*; Nyovanie, S.; Tahiliani, M.; Yatsunyk, L. A. Exploring structures of SAT2 centromeres. November 9-12, **2018**, *Annual Biomedical Conference for Minority Students (ABRCMS)*, Tampa FL.

6. Lee H. K.*; Nyovanie, S.; Tahiliani, M.; Yatsunyk, L. A. Exploring structures of Satellite 2 centromeres August 19-23, **2018**, *ACS National Meeting*, Boston, MA

7. Lin, Y.*; Yatsunyk, L. A. Crystal structure and biophysical studies of telomeric G-quadruplex DNA in complex with a small molecule ligand. August 19-23, **2018**, *ACS National Meeting*, Boston, MA

8. Yatsunyk, L. A.*; Powell, B.; Jordan, D.; Lin, L.; Gao, A. Structural studies of non-canonical DNA and DNA-ligand complexes. January 21-26, **2018**, *Gordon Research Conference: Metals in Biology*, Ventura, CA

9. Lin, Y.*; Yatsunyk, L. A. Biophysical and structural studies of telomeric DNA with a small molecule ligand as an anticancer strategy. November 1-4, **2017**, *Annual Biomedical Research Conference for Minority Students*, Phoenix, AZ. Received Travel Award & Biochemistry Poster Award.

10. Powell, B.*; Jordan, D.*; Chen, J.*; Brown, E.; Yatsunyk, L. A. Efforts toward the crystal structure of CAGAGG repeats. August 20-24, **2017**, *254th ACS National Meeting*, Washington, DC

11. Lin, Y.*; Gao, A.*; Yatsunyk, L. A. Pursuing the crystal structures of G-quadruplex DNA in complex with small molecule ligands. August 20-24, **2017**, *254th ACS National Meeting*, Washington, DC

12. Powell, B.*; Chen, J.; Jordan, D.; Brown, E. B.; Yatsunyk, L. A. Pursuit of the Crystal Structure of CAGAGG Repeats in DNA. May 31 - June 3, **2017**, *G4thering: 6th International Meeting on Quadruplex Nucleic Acids*, Prague, Czech Republic

13. Jordan, D.*; Chen, J.; Powell, B.; Brown, E. B.; Yatsunyk, L. A. The secondary structure of CAGAGG repeats linked to replication fork collapse. May 31 - June 3, **2017**, *G4thering: 6th International Meeting on Quadruplex Nucleic Acids*, Prague, Czech Republic

14. Yatsunyk, L. A.*; Gao, A.; Malawi, S.; Sabharwal, N. C.; Nicoludis, J. M.; Barrett, S. P. N-Methyl mesoporphyrin IX selectively stabilizes parallel stranded G-quadruplex DNA. Jan 22-27, **2017**, *Gordon Research Conference: Metals in Biology*, Ventura, CA

15. Xiang, I. M.;* Kaufman, B.; Yatsunyk, L. A. Interactions of RHPS4 with human mitochondrial DNA. Aug 21-25, **2016**, *252st ACS National Meeting*, Philadelphia, PA

16. Jordan, D.*; Malawi, S.*; Barrett, P.M.; Interactions between noncanonical secondary DNA and ligands. Aug 21-25, **2016**, *252st ACS National Meeting*, Philadelphia, PA

17. Boschi, E.*; Davis, S.; Taylor, S.; Jin, R.; Buenaventura, J.; Seigel, L; Purohit, V.; Butterworth, A.; Sheriff A.; Mastroianni, C.; Sheardy, R.; Yatsunyk, L.; Azam, M. Systematic study of G-quadruplex DNA complexes with cationic porphyrin TMPyP4 and its metal derivatives. Aug 21-25, **2016**, *252st ACS National Meeting*, Philadelphia, PA, USA.

18. Tran,V.T.; Turek-Herman, J.; Ferreira, M.; Williams, B. R.; Burgmayer, S. J. N.; Yatsunyk, L. A.* Interactions of ruthenium polypyridyl complexes with human telomeric DNA. Jan 25-29, **2015**, *Gordon Research Conference: Metals in Biology*, Ventura, CA

19. Nicoludis, J. M.; Barrett, S. P.; Miller, S.; Yatsunyk, L. A.* Structural insights into complex between human telomeric quadruplex DNA and N-methylmesoporphyrin IX. July 22-26, **2013**, *International Conference on Bioinorganic Chemistry*, Grenoble, France

20. Barrett, S. P.*; Ferreira, M. N.*; Nicoludis, J. M.; Miller, S.; Yatsunyk, L. A. Structural aspects of the interaction between human telomeric G-quadruplexes and *N*-methyl mesoporphyrin IX. Feb 2-6, **2013**, *Biophysical Society 57th Annual Meeting*, Philadelphia, PA

21. Barrett, S. P.; Ferreira, M. N.; Nicoludis, J. M.; Miller, S.; Yatsunyk, L. A.* Structural aspects of the interaction between human telomeric G-quadruplexes and *N*-methyl mesoporphyrin IX. Jan 20-25, **2013**, *Gordon Research Conference on Metals in Biology*, Ventura, CA

22. Sabharwal, N. C.*; Tran,V. T.*; Williams, B.R.; Burgmayer,S. J. N.; Yatsunyk, L. Y. Investigation of the interactions between DNA and stabilizing metallic compounds. Aug 19-23, **2012**, *244st ACS National Meeting*, Philadelphia, PA

23. Nicoludis, J. M.*; Barrett, S. P.*; Ferreira, M. N.*; Miller, S.; Yatsunyk, L. A. Interaction of human telomeric DNA with N-methyl mesoporphyrin IX. Aug 19-23, **2012**, *244st ACS National Meeting*, Philadelphia, PA

24. Nicoludis, J. M.; Barrett, S. P.; Yatsunyk, L. A.* N-methylmesoporphyrin IX discriminates between different telomeric quadruplex DNA structures. Jan 22- 27, **2012**, *Gordon Research Conference on Metals in Biology*, Ventura, CA

25. Nicoludis, J. M.*; Barrett, S. P.; Yatsunyk, L. A. Stabilization and structural rearrangement of Tel22 in the presence of NMM under low K^+ conditions. June 28-July 1, **2011**, *Third International Meeting on GQ and G-assembly*, Sorrento, Italy

26. Nicoludis, J. M.; Barrett, S. P.; Yatsunyk, L. A.* Interaction of NMM with human telomeric DNA. Jan 31-Feb 5, **2011**, *Gordon Research Conference on Metals in Biology*, Ventura, CA

27. Bhattacharjee, A.; Kornfilt D.; Yatsunyk, L.* Induction of parallel G-quadruplex DNA by ZnT4 porphyrin. Jan 30-Feb 4, **2010**, *Gordon Research Conference on Metals in Biology*, Ventura, CA

28. Butterworth, A.; Chirayath, L. A.; Taylor, S.; Yatsunk, L. A., Azam, M.* Interaction of cationic porphyrin and its metal derivatives with G-quadruplex DNA. Aug 16-19, **2009**, *237th ACS National Meeting*, Washington, DC

29. Butterworth, A.; Chirayath, L. A.; Yatsunk, L. A., Azam, M*. Interaction of cationic porphyrin and its metal derivatives with G-quadruplex DNA. Apr 18-21, **2009**, *2nd International Meeting on Quadruplex DNA,* Louisville, KY

30. Taylor, S.; Bhattacharjee, A.; Halley, D.; Marquardt, D.; Azzellini, G.; Yatsunyk, L.* Interaction of cationic porphyrins with G-quadruplex DNA. Apr 18-21, **2009**, *2nd International Meeting on Quadruplex DNA,* Louisville, KY

31. Taylor, S.; Bhattacharjee, A.; Halley, D.; Marquardt, D.; Azzellini, G.; Yatsunyk, L.* Interaction of cationic porphyrins with G-quadruplex DNA. Jan 25-30, **2009**, *Gordon Research Conferences on Metals in Biology*, Ventura, CA

32. Taylor, S.*; Bhattacharjee, A.*; Halley, D.; Marquardt, D.*; Azzellini, G.; Yatsunyk, L. Study of cationic porphyrins' interactions with G-quadruplex DNA" Aug 17-21, **2008**, *236th ACS National Meeting*, Philadelphia, PA

33. Yatsunyk, L. A.*; Easton, J. A.; Kim, L. R.; Sugarbaker, S. A.; Crowder, M. W.; Rosenzweig, A. C. Structure and Metal Binding Properties of ZnuA from *E. coli*. Jan **2008**, *Gordon Research Conferences on Metals in Biology*, Ventura, CA

34. Yatsunyk, L. A.*; Rosenzweig, A. C. Copper(I) Binding and Transfer by the N-terminus of the Wilson Disease Protein. June 17-22, **2006**, *FASEB conference: Trace Element Micronutrients: Integrating Basic and Applied Research*, Snowmass Village, CO

35. Yatsunyk, L. A.*; Rosenzweig, A. C. Copper(I) Binding and Transfer by the N-terminus of the Wilson Disease Protein. July 31-Aug 5, **2005**, *12th International Conference on Bioinorganic Chemistry*, Ann Arbor, MI

36. Yatsunyk, L. A.*; Wernimont, A. K.; Rosenzweig, A. C. Binding of Copper(I) by the Wilson Disease Protein. Oct 23-28, **2004**, *4th International Meeting on "Copper Homeostasis and its Disorder: Molecular and Cellular Aspects"* Ischia, Italy

37. Yatsunyk, L. A.*; Walker, F. A. Structure, NMR, EPR and Magnetic Susceptibility of $[ORTPP(4\text{-}CNPy)_2]ClO_4$ complexes. Feb 6-9, **2003**, *Gordon Research Conferences, Graduate Research Seminar: Bioinorganic Chemistry*, Ventura, CA

38. Yatsunyk, L. A.*; Walker, F. A. Low-spin Ferriheme Models of the Cytochromes: Correlation of Molecular Structure and EPR Spectral Type. July, **2002**, *EUROBIC-6*, Lund/Copenhagen, Sweden/Denmark

39. Walker, F. A.; Yatsunyk, L. A.*; Suga, M. Correlation of Molecular Structure and EPR Spectral Type in Low-Spin Ferriheme Models of the Cytochromes, and Effects on Reduction Potentials. July, **2002**, *XXXV International Conference on Coordination Chemistry*, Heidelberg, Germany

40. Yatsunyk, L. A.*; Walker, F. A. Kinetic Studies of Ring Inversion of Paramagnetic Non-Planar Porphyrinato Complexes of High- and Low-Spin Iron(III) by NMR Techniques. April **2002**, *43rd ENC (Experimental NMR Conference)*, Asilomar, CA

41. Yatsunyk, L. A.*; Walker, F. A. EPR and X-Ray Crystallographic Studies of non-Planar Porphyrins. January **2002**, *Gordon Research Conferences, Graduate Research Seminar: Bioinorganic Chemistry*, Ventura, CA
42. Yatsunyk, L. A.*; Walker, F. A. NMR, EPR and X-ray Crystallographic Studies of Paramagnetic non-Planar Porphyrinato Complexes of High- and Low-Spin Iron(III). April **2001**, *National ACS Meeting*, San Diego, CA
43. Yatsunyk, L. A.*; Walker, F. A. NMR, EPR and X-ray Crystallographic Studies of Paramagnetic non-Planar Porphyrinato Complexes of High- and Low-Spin Iron(III). March **2001**, *42nd ENC (Experimental NMR Conference)*, Orlando, FL
44. Yatsunyk, L. A.*; Walker, F. A. NMR, EPR and X-ray Crystallographic Studies of Paramagnetic non-Planar Porphyrinato Complexes of High- and Low-Spin Iron(III). January **2001**, *Gordon Research Conferences, Graduate Research Seminar: Bioinorganic Chemistry*, Ventura, CA
45. Panchuk, O.*; Savitsky, A.; Ulyanitsky, K.; Parfenyuk, O.; Yatsunyk, L.; Ilashcuk, A. IV-A group dopants in CdTe, obtained by low-temperature method: electrical and optical properties. September 8-12, **1997**, *Second International School Conference. Physical Problems in Material Science of Semiconductors*, Chernivtsy, Ukraine
46. Fochuk, P.*; Shcherbak, L.; Yatsunyk, L.; Panchuk, O.; Odulov, S. CdTe<Ge>as photorefractive material. June 11-13, **1997**, *Topical Meeting on Photorefractive Materials, Effects, and Devices (PR'97)*, Nihon Aerobic Center, Chiba, Japan
47. Fochuk, P.*; Yatsunyk, L.; Shcherbak, L.; Panchuk, L. Point defects in CdTe crystals, doped with amphoteric elements. **1996**, *Solid State Crystals: Growth and Characterization*, Zacopane, Poland

Honors and Awards

- Pfizer Summer Undergraduate Research Fellowship Award to research student David Kornfilt for summer 2008 and to Michelle Ferreira for summer 2013
- Camille and Henry Dreyfus Foundation Faculty Start-up Award
- Katten Muchin Rosenman Travel Scholarship Award, 2006
- Nominee for Marvel Fellowship, University of Arizona, 2002
- ENC (Experimental NMR Conference) Student Travel Stipend 2001, 2002
- Mid Career Award, Department of Chemistry, University of Arizona, 2000, 2001
- Teaching Commendation, Department of Chemistry, University of Arizona, 2000

Student Awards

- Barry Goldwater Scholarship honorable mention (D. Jordan '19);
- ACS, Division of Inorganic Chemistry Award for Undergraduate Research – honorable mention (B. Powell '18);
- Fulbright (S. Davis '15);

- National Science Foundation Graduate Research Fellowship (S. Barrett ’13 and J. Nicoludis ‘12);
- Barry Goldwater Scholarship (J. Nicoludis ’12);
- National Defense Science and Engineering Graduate Fellowship (J. Nicoludis ’12);
- ASC-SURF fellowship (M. Ferreira ’14 and D. Kornfilt ‘09).

Poster Presentations at Local and Regional Meetings
(presenters are marked with *)

1. Coyle, E.;* Pule, K.;* Xing, E.; Hendrickson, A.; Suh, J.; Seth, P. Investigation of Intramolecular Left-Handed G-Quadruplexes. May 28-31 **2025**, *the 53^{d} Middle Atlantic Regional Meeting of the American Chemical Society*, Seton Hall University, NJ
2. Ali, A.;* Swale, H.; Ye, M.; Martin, K.; Yatsunyk, L.A. Structural Analysis of Crystal Structure TET25-TrisQO Complexes. April 1-2, **2025**, *RNADay*, University of Pennsylvania, PA.
3. Xing, E.*, Yatsunyk, L. A. "Structural Analysis of a Left-Handed G-Quadruplex." September 26-27, **2024**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
4. Eyiolowope, J.,* Oishi-Patel, M.,* and Yatsunyk, L.A. “Characterization of interactions between five tetrad G-quadruplex LM7 and small molecule ligands” September 26-27, **2024**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
5. Hendrickson, A. D.,* Xing, E., Seth, P, Yatsunyk, L. A. Investigation of Intramolecular Left-Handed G-Quadruplexes. September 26-27, 2024, *Sigma Xi Swarthmore Chapter Poster Session*, Swarthmore College in Swarthmore, PA.
6. Ali, A.*, Swale, H., Ye, M., Martin, K., Yatsunyk, L. A. Analysis of crystal structure of TET25-TrisQO complex. September 26-27, **2024**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
7. Swale, H.,* Ali, A., Yatsunyk, L. A. TET25 G-quadruplex in complex with small molecule ligand TrisQ. September 26-27, **2024**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
8. Ali, A., Swale, H.,* and Eyiolowope, J.* Crystallization of TET25 in complex with TrisQ. June 5-8, **2024**, *the 52nd Middle Atlantic Regional Meeting of the American Chemical Society*, Pennsylvania State University in University Park, PA.
9. Xing, E.,* Hendrickson, A. D.,* Investigation of Intramolecular Left-Handed G-Quadruplexes. June 5-8, **2024**, *the 52nd Middle Atlantic Regional Meeting of the American Chemical Society*, Pennsylvania State University in University Park, PA.
10. Ali, A.*, Ye, M., Martin, K., Yatsunyk, L. A. Biophysical Characterization and Crystallization of TET25 in complex with TrisQ. Sept 28-29, **2023**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
11. Lam, G*, Martin, K., Yatsunyk, L. A. Structural Analysis of Crystal Structure TET25-PyDH2 Complexes. Sept 28-29, **2023**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.

12. Hu, J.*, Yatsunyk, L. A. Biophysical Characterization of LM Sequences. Sept 28-29, **2023**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
13. Xing, E.*, Seth, P., Yatsunyk, L. A. Investigation of a Hybrid RH-LH G-Quadruplex. Sept 28-29, **2023**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
14. Kim, H.*, Li, K., Yatsunyk, L. A. Formation of a left-handed G-quadruplex in KRAS proto-oncogene and interaction with ligand, NMM. June 9-10, **2023**, *the 51st Middle Atlantic Regional Meeting of the American Chemical Society*, the Graduate Center of the City University of New York, NY, USA
15. Lam, G.*, Martin, K, Yatsunyk, L. A. Study of the non-canonical G-rich DNA TET25 in complex with PyDH2 as a potential anticancer therapeutic. June 9-10, **2023**, *the 51st Middle Atlantic Regional Meeting of the American Chemical Society*, the Graduate Center of the City University of New York, NY, USA
16. Kim, H.*, Seth, P.*, Yatsunyk, L. A. A cytosine-rich sequence from the PDGF gene promoter forms stable i-Motif structures. Sept 22-23, **2022**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
17. Ye, M.*; Chen, E.*; Yatsunyk, L. A. Biophysical and X-ray crystallographic characterization of a homopurine sequence, Oligo 10. Sept 22-23, **2022**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
18. Chen, E.*; Lee, H-K.; Yatsunyk, L. A. Unique structural Motif of Satellite III DNA repeats. Sept 22-23, **2022**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
19. Kim, H.*; P. Seth, P.*; Martin, K. N.; Yatsunyk, L. A. Biophysical characterization and crystallization of PDGF DNA. June 1-4, **2022**, *the 50th Middle Atlantic Regional Meeting of the American Chemical Society*, the College of New Jersey, NJ, USA.
20. Martin, K. N.*; Yatsunyk, L. A. Biophysical characterization and crystallization of HIF-1A construct EK. June 1-4, **2022**, *the 50th Middle Atlantic Regional Meeting of the American Chemical Society*, the College of New Jersey, NJ, USA
21. Ye, M.*; Yun, S.*; Yatsunyk, L. A. Biophysical characterization and crystallization of Oligo 10. Sept 30-Oct 1, **2021**, *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
22. Li, K.*; Yatsunyk, L. A. Unique DNA Structures in the HRAS Oncogene Promoter. Sept 30-Oct 1, **2021**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
23. Pohl, C.*; Yatsunyk, L. A. The extension of a G-tract alters G-Quadruplex folding in a disease causing mtDNA sequence. Sept 30-Oct 1, **2021**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
24. Chen, E.*; Lee H. K.; Yatsunyk, L. A. First Duplex Crystal Structure of Satellite III DNA Repeats. Sept 30-Oct 1, **2021**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.
25. McCarthy, S.*; Miao, J.; Beseiso D.; Lin, L.; Yatsunyk, L. Y. Studying and solving the structure of G-quadruplex TET sequences. January 22, **2020**, *ACS - Philadelphia Local*

Section, Younger Chemist Committee annual poster session, University of Sciences, Philadelphia, PA.

26. Beseiso, D.*; Miao, J.; McCarthy, S.; Yatsunyk, L. Y. Biophysical and X-ray characterization of telomeric G-quadruplex. January 22, **2020**, *ACS - Philadelphia Local Section, Younger Chemist Committee annual poster session*, University of Sciences, Philadelpha, PA.
27. McCarthy, S.*; Miao, J.; Beseiso D.; Lin, L.; Yatsunyk, L. Y. Studying and solving the structure of G-quadruplex TET sequences. November 9, **2019**, *Philadelphia Inorganic Colloquium*, St. Joseph University, Philadelphia, PA.
28. Miao, J.*; Beseiso D.; Yatsunyk, L. Y. Biophysical Characterization and Crystallization of *Tetrahymena thermophila* Telomeric Sequences. November 9, **2019**, *Philadelphia Inorganic Colloquium*, St. Joseph University, Philadelphia, PA.
29. Miao, J.*; Beseiso D.; Yatsunyk, L. Y. Biophysical Characterization and Crystallization of *Tetrahymena thermophila* Telomeric Sequences. September 12-13, **2019**, *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
30. Lin, L. Y.*; Yatsunyk, L. Y. Biophysical Characterization and Crystallization of *Tetrahymena thermophila* Telomeric Sequences. September 12-13, **2019**, *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
31. Beseiso, D.*; Miao, J.; Yatsunyk, L. Y. Studying and Solving the Structures of G-Quadruplex TET Sequences. September 12-13, **2019**, *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
32. Rubien, J.*; Portz, B.; Midla, S.; Rabeler C.; Yatsunyk, L. Y.; Carone, D. The physics of cancer: human satellite II RNA structure and functions. September 12-13, **2019**, *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
33. Jordan, D.*; Powell, B. M.; Chen, J.; Brown, E.; Yatsunyk, L. A. Biophysical efforts toward the structure of tandem DNA repeats linked to replication stress. September 14, **2018,** *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
34. Lee, H. K.*; Nyovanie, S. T.; Yatsunyk, Y. A.; Tahiliani, M. Exploring Secondary Structures of SAT2 Centromeres. September 14, **2018,** *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
35. Lin, L. Y.*; Powell, B. M.; Yatsunyk, Y. A. Crystal structure and biophysical studies of telomeric G-quadruplex DNA in complex with a small molecule ligand. September 14, **2018,** *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
36. Yett, A.*; Nyovanie, S. T.; Yatsunyk, Y. A. Towards the crystal structures of VEGF and G4TERT. September 14, **2018,** *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA.
37. Lin, Y.*; Yatsunyk, L. A. Biophysical and structural studies of telomeric G-quadruplex DNA with a small molecule ligand as an anticancer strategy. May 5, **2018**, *11th Frontiers in Chemistry and Biology Symposium*, University of Pennsylvania, Philadelphia, PA, USA **3d place for the best undergraduate poster.**

38. Nyovanie S.T.*; Yett A.; Yatsunyk L. A. Interactions between promoter region G-quadruplex DNA and N-methylmesoporphyrin IX. May 5, **2018**, 11th *Frontiers in Chemistry and Biology Symposium, FCBIS,* University of Pennsylvania, Philadelphia, PA, USA

39. Powell, B. P.*; and Yatsunyk L. A. Structural studies of CAGAGG repeats from difficult-to-replicate regions of the mammalian genome. May 5, **2018**, *11th Frontiers in Chemistry and Biology Symposium, FCBIS,* University of Pennsylvania, Philadelphia, PA, USA

40. Lin, Y.*; Yatsunyk, L. A. Biophysical and structural studies of telomeric G-quadruplex DNA with a small molecule ligand as an anticancer strategy. April 10, **2018**, *ACS - Philadelphia Local Section, Younger Chemist Committee 13th annual poster session*, Temple, PA **2nd place for the best undergraduate poster**

41. Nyovanie, S. T.; Yett, A.*; Yatsunyk, L. A. Interactions between promoter region G-quadruplex DNA and N-methylmesoporphyrin IX. April 10, **2018**, *American Chemical Society - Philadelphia Local Section, Younger Chemist Committee 13th annual poster session*, Temple, PA

42. Powell, B.; Jordan, D.; Chen, J.; Brown, E.; Yatsunyk, L. A. Efforts towards the Crystal Structure of a Noncanonical DNA Repeat Implicated in Cancer. October 27, **2017**, *Genetics Society of America Early Career Scientist Symposium*, New York, NY. Presented by Samantha Nyovanie*

43. Xiang, I. M.*; Lin, Y.; Yatsunyk, L. A. Interactions of telomeric DNA with small molecule ligands as an anticancer strategy. October 28, **2017**, *Philadelphia Inorganic Colloquium (PCI-5)*, Swarthmore, PA.

44. Jordan, D.*; Barrett, P.*; Chen, J.; Brown, E.; Yatsunyk, L. A. Surveying the fold of DNA repeats associated with replication fork collapse. October 28, **2017**, *Philadelphia Inorganic Colloquium (PCI-5)*, Swarthmore, PA.

45. Jordan, D.*; Barrett, P.*; Chen, J.; Brown, E.; Yatsunyk, L. A. Surveying the fold of DNA repeats associated with replication fork collapse. September 23, **2017**, *Haverford Undergraduate Research Symposium*, Haverford, PA

46. Jordan, D.*; Barrett, P.*; Chen, J.; Brown, E.; Yatsunyk, L. A. Surveying the fold of DNA repeats associated with replication fork collapse. September 22, **2017**, *Swarthmore Chapter Sigma Xi Poster Session*, Swarthmore, PA

47. Gao, A;* Yatsunyk, L.A.; Structural Studies of Non-Canonical DNA Sequences with stabilizing ligands. October 28, **2017**, *Philadelphia Inorganic Colloquium (PIC-5)*, Swarthmore, PA.

48. Gao, A;* Yatsunyk, L.A.; Structural Studies of Non-Canonical DNA Sequences with stabilizing ligands. September 23, **2017**, *Haverford Undergraduate Research Symposium*, Haverford, PA.

49. Gao, A;* Yatsunyk, L.A.; Structural studies of non-canonical DNA sequences with stabilizing ligands. September 21-22, **2017**, *Sigma Xi Poster Session*, Swarthmore, PA.

50. Lin, Y.*; Yatsunyk, L. A. Interaction of telomeric DNA with *N*-methyl mesoporphyrin IX as an anticancer strategy. October 28, **2017**, *Philadelphia Inorganic Colloquium (PIC-5)*, Swarthmore, PA.

51. Lin, Y.*; Yatsunyk, L. A. Interaction of telomeric DNA with *N*-methyl mesoporphyrin IX as an anticancer strategy. September 23, **2017**, *Haverford Undergraduate Research Symposium*, Haverford, PA

52. Lin, Y.*; Yatsunyk, L. A. Biophysical and structural studies of telomeric DNA with a small molecule ligand as an anticancer strategy. September 21-22, **2017**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.

53. Nyovanie, S. T.*; Yatsunyk, L. A. Toward structure of the G-quadruplexes formed by VEGF and G4TERT. September 21-22, **2017**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.

54. Nyovanie, S. T.*; Yatsunyk, L. A. Toward structure of the G-quadruplexes formed by VEGF and G4TERT. October 28, **2017**, *Philadelphia Inorganic Colloquium (PIC-5),* Swarthmore, PA.

55. Nyovanie, S. T.*; Yatsunyk, L. A. Toward structure of the G-quadruplexes formed by VEGF and G4TERT. September 23, **2017**, *Haverford Undergraduate Research Symposium*, Haverford, PA.

56. Powell, B.*; Jordan, D.; Chen, J.; Brown, E.; Yatsunyk, L. A. Crystallization and phasing efforts of a noncanonical DNA sequence implicated in cancer. October 28, **2017**, *Philadelphia Inorganic Colloquium (PIC-5),* Swarthmore, PA.

57. Powell, B.*; Jordan, D.; Chen, J.; Brown, E.; Yatsunyk, L. A. Crystallization and phasing efforts of a noncanonical DNA sequence implicated in cancer. September 23, **2017**, *Haverford Undergraduate Research Symposium*, Haverford, PA.

58. Powell, B.*; Jordan, D.; Chen, J.; Brown, E.; Yatsunyk, L. A. Crystallization and phasing efforts of a noncanonical DNA sequence implicated in cancer. September 21-22, **2017**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA.

59. Xiang, I. M.; Lin, Y.*; Yatsunyk, L. A. Interactions of telomeric DNA with small molecule ligands as an anticancer strategy. June 4-6, **2017**, *ACS Middle Atlantic Regional Meeting*, Hershey, PA

60. Gao, A.*; Yatsunyk, L. A. Characterizing the dimerization of N-Methyl Mesoporphyrin IX via fluorometric and UV-Vis analysis. June 4-6, **2017**, *ACS Mid-Atlantic Regional Meeting*, Hershey, PA.

61. Powell, B.;* Chen, J.; Jordan D.; Brown, E.; Yatsunyk, L. A. Intrinsically difficult to replicate sequences: Crystallizing the $(CAGAGG)_n$ repeat sequence. November 5, **2016,** *Philadelphia Inorganic Colloquium (PIC-4),* Villanova, PA

62. Jordan, D.;* Barrett, P.M.; Brown, E.; Yatsunyk, L. A. Investigating the secondary structure of non-canonical DNA implicated in cancer. November 5, **2016,** *Philadelphia Inorganic Colloquium (PIC-4),* Villanova, PA

63. Gao, A.;* Yatsunyk, L. A. Fluorometric studies on the dimerization patterns of N-methyl mesoporphyrin IX; Ho, L.;* Sheth, A.; Yatsunyk, L. A. Characterization and crystallization of G-Quadruplex forming SRC DNA. November 5, **2016,** *Philadelphia Inorganic Colloquium (PIC-4),* Villanova, PA

64. Xiang, I. M.;* Kaufman, B.; Yatsunyk, L. A. Interactions of human mitochondrial DNA with RHPS4. September 24, **2016**, *Haverford Undergraduate Research Symposium*, Haverford, PA

65. Jordan, D.;* Barrett, P.M.; Brown, E.; Yatsunyk, L. A. Investigating the secondary structure of non-canonical DNA implicated in cancer. September 24, **2016**, *Haverford Undergraduate Research Symposium*, Haverford, PA

66. Powell, B.;* Yatsunyk, L. A.; Chen, J.; Jordan D.; Tsai, Y.-C.; Shastri, N.; Brown, E. Intrinsically difficult to replicate sequences: Pursuing the structure of (CAGAGG)n repeats. September 24, **2016**, *Haverford Undergraduate Research Symposium*, Haverford, PA

67. Xiang, I. M.;* Kaufman, B.; Yatsunyk, L. A. Interactions of RHPS4 with human mitochondrial DNA. Sept 15-16, **2016**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

68. Jordan, D.*; Malawi, S.*; Barrett, P.M.; Interactions between noncanonical secondary DNA and ligands. Sept 15-16, **2016**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

69. Powell, B.;* Chen. J.; Jordan D.; Tsai, Y.-C.; Shastri, N.; Brown, E.; Yatsunyk, L. A. Intrinsically difficult to replicate sequences: Pursuing the structure of (CAGAGG)n repeats. Sep15-16, **2016**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

70. Liu, A.*; Malawi, S.*; Powell B.*; and Yatsunyk, L. A. Interactions between non-canonical DNA and ligands. March 19, **2016**, *Philadelphia Inorganic Colloquium (PIC-3),* University of Delaware, DE

71. Ruan, T. L.*; Buyco, D. G.*; Davis, S.; Yatsunyk, L. A. Interactions Between G-Quadruplex DNA and Porphyrin Ligands. March 19, **2016**, *Philadelphia Inorganic Colloquium (PIC-3),* University of Delaware, DE

72. Chen, J.*; Yatsunyk, L. A.; Brown, E.; Tsai, Y-Ch.;Shastri, N. Secondary Structure Investigation of (CAGAGG)n Repeats. September 17-18, **2015**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

73. Chen, J.*; Yatsunyk, L. A.; Brown, E.; Tsai, Y-Ch.; and Shastri, N. Secondary Structure Investigation of (CAGAGG)n Repeats. September 19, **2015**, *Haverford Undergraduate Research Symposium*, Haverford, PA

74. Ruan, T. L.*; Buyco, D. G.*; Davis, S.; Yatsunyk, L. A. Interactions Between G-Quadruplex DNA and Porphyrin Ligands. September 17-18, **2015**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

75. Ruan, T. L.*; Buyco, D. G.*; Davis, S.; Yatsunyk, L. A. Interactions Between G-Quadruplex DNA and Porphyrin Ligands. September 19, **2015**, *Haverford Undergraduate Research Symposium*, Haverford, PA

76. Lee, J. H.*; Chen, Y.*; Yatsunyk , L. A. TCP and ZnTCP's stabilizing interactions with human telomeric DNA. September 19-20, **2014**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

77. Turek-Herman, J.*; Tran, V.; Yatsunyk, L. A. Polypyridyl Ru Complexes as G-quadruplex DNA Stabilizers. September 19-20, **2014**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

78. Davis, S.*; Harbeck, C.; Tran, V.; Yatsunyk, L. A. Investigation of the quadruplex binding, stabilization, and selectivity of porphyrins with varying peripheral substituents. September 19-20, **2014**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

79. Davis, S.*; Bledsoe, K.*; Harbeck, C.; Tran, V.; Yatsunyk, L. A. Investigation of the quadruplex binding, stabilization, and selectivity of macrocyclic ligands. July 30, **2014**. *Mid-Atlantic Seaboard Inorganic Symposium*, Temple University, Philadelphia, PA

80. Lee, J. H.*; Chen, Y.*; Yatsunyk , L. A. TCP and ZnTCP's stabilizing interactions with human telomeric DNA. July 30, **2014**. *Mid-Atlantic Seaboard Inorganic Symposium,* Temple University, Philadelphia, PA

81. Sabharwal, N.C.*; Savikhin, V.; Turek-Herman, J.; Szalai, V.; Yatsunyk, L.A. N-methyl mesoporphyrin IX fluorescence as a reporter of strand orientation in guanine quadruplexes. October 4-5, **2013**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

82. Sabharwal, N.C.*; Savikhin, V.; Turek-Herman, J.; Szalai, V.; Yatsunyk, L.A. N-methyl mesoporphyrin IX fluorescence as a reporter of strand orientation in guanine quadruplexes. September 21, **2013**, *Haverford Undergraduate Research Symposium*, Haverford, PA

83. Ferreira, M. N.*; Yatsunyk, L. Y. Synthesis and preliminary characterization of novel polyamide derivatives of protoporphyrin-IX and mesoporphyrin-IX. October 26-27, **2012**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

84. Sabharwal, N. C.*; Tran,V. T.; Williams, B.R.; Burgmayer,S. J. N.; Yatsunyk, L. Y. Investigation of the interactions between DNA and stabilizing metallic compounds. October 26-27, **2012**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

85. Nicoludis, J. M*.; Barrett, S. P.; Ferreira, M. N.; Miller, S.; Yatsunyk, L. A. Interaction of human telomeric DNA with N-methyl mesoporphyrin IX. October 26-27, **2012**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA

86. Ferreira, M. N.; Yatsunyk, L. Y. Synthesis and preliminary characterization of novel polyamide derivatives of protoporphyrin-IX and mesoporphyrin-IX. September 22, **2012**, *9th Undergraduate Fall Research Symposium at Haverford College*, Haverford, PA

87. Sabharwal, N. C.; Tran,V. T.; Williams, B.R.; Burgmayer,S. J. N.; Yatsunyk, L. Y. Investigation of the interactions between DNA and stabilizing metallic compounds. September 22, **2012**, *9th Undergraduate Fall Research Symposium at Haverford College*, Haverford, PA

88. Nicoludis, J. M.; Barrett, S.; Miller, S.; Holliday, A.; Yatsunyk, L. A. "Structural and mechanistic aspects of the interaction between human telomeric G-quadruplexes and *N*-methyl mesoporphyrin IX" April **2012**, *Swarthmore Chemistry Department Poster Session,* Swarthmore, PA

89. Sabharwal, N.; Nicoludis, J. M.; Yatsunyk, L. A. "Investigating the Interactions between DNA and a Platinum Metalloporphyrin" Spring **2012**, *Chemistry Department Poster Session, Swarthmore College,* Swarthmore, PA *and at Sigma Xi Chapter at the Thomas Jefferson*

University, Student Research Day. Winner of the Poster competition at the latter event, Philadelphia, PA

90. Nicoludis, J. M.; Barrett, S. P.; Yatsunyk, L. A. "Stabilization and structural rearrangement of Tel22 in the presence of NMM under low K^+ conditions" October **2011**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA
91. Ahluwalia, K.; Yatsunyk, L. A. "Investigation of ZnT4 Porphyrin Interactions with Telomeric DNA" October **2010**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA
92. Nicoludis, J. M.; Barrett, S. P.; Yatsunyk, L. A. "*N*-methyl Mesoporphyrin IX Induces a G-quadruplex Isomerization" October **2010**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA
93. Barrett, S. P.; Nicoludis, J. M.; Yatsunyk, L. A. "Investigating the interactions between G-quadruplex DNA and N-methyl mesoporphyrin IX" October **2010**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA
94. Nicoludis, J. M.; Smith, J.; Johnson, F. B.; Yatsunyk L. A. "G-quadruplex Stabilization by N-methyl Mesoporphyrin IX (NMM)" September **2009**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA
95. Evans, E.; Yatsunyk, L. A. "Chiral Sensing: Synthesis and Preliminary Characterization of Lanthanide-Porphyrin-β-diketonates" September **2009**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA
96. Taylor, S.; Bhattacharjee, A.; Halley, D.; Marquardt, D.; Azzellini, G.; Yatsunyk, L. A. "Interaction of Cationic Porphyrins with G-quadruplex DNA" September **2008**, *Swarthmore Chapter Sigma Xi Poster Session,* Swarthmore, PA